

**REMARKS**

Claims 1-4 are pending in this application, of which claims 1 and 4 have been amended.  
No new claims have been added.

The Examiner has maintained from the previous Office Action the 35 U.S.C. § 103(a) rejection of claims 1-4 as unpatentable over **Weaver, Jr. et al.** in view of **Santhoff** (both previously applied).

Applicant respectfully traverses this rejection.

As noted in Applicant's previous response, **Weaver, Jr. et al.** discloses a method and apparatus for time division duplex (TDD) repeating a spread spectrum signal, where the spread spectrum signal is comprised of a series of code symbols modulated with a pseudonoise (PN) sequence. The TDD repeater receives intermittently the spread spectrum signal at a location remote from a source supplying the spread spectrum signal. The TDD repeater amplifies and delays the received spread spectrum signal by a predetermined amount. The TDD repeater transmits intermittently the delayed amplified received spread spectrum signal such that the TDD is not receiving the spread spectrum signal when it is transmitting the signal energy.

**Santhoff** discloses an ultra-wideband geographic location system, and FIG. 13 shows UWB units 1110 which can relay information to UWB requesting unit 1105.

**Santhoff** fails to disclose any delay between the reception and transmission of the UWB pulses, and the delay taught by **Weaver, Jr. et al.** is for CDMA spread spectrum signals, which are not individual pulses, as are the UWB pulse signals. Thus, these references may not be

combined to teach a transmitting timing which is different from the receiving timing by a pulse unit, as recited in claim 1 of the instant application.

In response to this argument, the Examiner has urged:

The examiner disagrees. Weaver et al. teach wideband spread spectrum signal and transmitting time which differ from reception time (see FIG. 3) in which Weaver et al. disclose a repeater with delay time and switch which turns on and off based on reception and transmission of wideband signals (see column 10, line 60-column 11, line 32 and column 13, line 65 through column 14, line 21, and FIGS. 3 and 5). Therefore, delay and Weaver et al. not by Santhoff teaches switching between transmission and reception and applicants argument is moot (Sic).

The Examiner fails to recognize that Weaver, Jr. et al. is directed toward CDMA spread spectrum signals. Column 10, lines 33-39 disclose:

Another factor in choosing the switching rate is that the faster the switching rate, the higher the intermodulation products produced within the switched CDMA waveform. The CDMA waveform spectrum resembles band-limited white noise. When the CDMA waveform is modulated on and off, sidebands are created in the adjacent bands. In other words, the faster the switching rate, the higher the energy levels of the created sidebands.

Thus, the waveform of Weaver, Jr. et al. is not a pulse series, as in Santhoff. Thus, these references are not combinable to teach the present invention.

The Examiner also urged:

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., a sneak path wave between the transmitting side and receiving side can be resolved, and it is possible to easily realize a UWB communication system capable of carrying out bi-directional communications) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Accordingly, claims 1 and 4 have been amended to recite that a "sneak path wave between the receiver and the transmitter" is prevented, and the 35 U.S.C. § 103(a) rejection should be withdrawn.

In view of the aforementioned amendments and accompanying remarks, claims 1-4, as amended, are in condition for allowance, which action, at an early date, is requested.

If, for any reason, it is felt that this application is not now in condition for allowance, the Examiner is requested to contact Applicant's undersigned attorney at the telephone number indicated below to arrange for an interview to expedite the disposition of this case.

In the event that this paper is not timely filed, Applicant respectfully petitions for an appropriate extension of time. Please charge any fees for such an extension of time and any other fees which may be due with respect to this paper, to Deposit Account No. 01-2340.

Respectfully submitted,

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